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# (54) SYNONYM IDENTIFICATION BASED ON CO-OCCURRING TERMS

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#### (56) References Cited

### U.S. PATENT DOCUMENTS

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### (57) ABSTRACT

Methods, systems, and apparatus, including computer programs encoded on a computer storage medium, for identifying a particular query term of an original search query, identifying a candidate synonym for the particular query term in context with an other non-adjacent query term of the original search query that is not adjacent to the particular query term in the original search query, accessing stored data that specifies, for a pair of terms that includes the particular query term and the candidate synonym of the particular query term, a respective confidence value for the other non-adjacent query term, determining that, in the stored data, the confidence value for the other non-adjacent query term satisfies a threshold, and determining to revise the original search query to include the candidate synonym of the particular query term, based on determining that the confidence value the other non-adjacent query term satisfies the threshold.

### 26 Claims, 6 Drawing Sheets

